

June 8, 2007

Mrs. Myra Reece Chief, Bureau of Air Quality South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia, South Carolina 29201

SUBJECT:

NETWORK DESCRIPTION AND AMBIENT AIR NETWORK

MONITORING PLAN CALENDAR YEAR 2008

GREATER GREENVILLE CHAMBER OF COMMERCE COMMENTS

Dear Mrs. Reece:

As Chairman of the Environmental Issues Committee for the Greater Greenville Chamber of Commerce and as an active member of the State Chamber Environmental Technical Committee, I want to thank you for the extensive efforts you and your staff have made for public input into the "Network Description and Ambient Air Network Monitoring Plan for Calendar Year 2008" (the PLAN). I believe that the process was useful both for your staff and for the various external stakeholders who were able to participate. I believe the proposed plan as amended and presented in redline represents the consensus efforts of these groups.

I do have some concerns with regards to the proposed plan released on May 7 and offer the following comments. These comments were discussed with you and your staff on May 30, 2007.

The stakeholders and your staff undertook a review of the Upstate, Midlands, and Georgetown area monitors. During the site audits, a checklist was completed and I understood that your staff agreed with the findings from the site audits. The checklist included a section that provided detail on the "musts" from Appendix E of the regulation and the "shoulds" from Appendix E and the 1997 guidance documents for the PM2.5 monitoring sites. There are several sites that do not meet one or more of the



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"musts" listed on the checklist, and as such, do not meet the minimum requirements for ambient air monitoring sites. As a consequence of this review process, there are two points on which the PLAN must be based. The first point is that the PLAN cannot state without qualification that "all sites meet" the requirements of the regulation and its appendices. The PLAN can state that SCDHEC intends to make necessary site modifications or site relocations to achieve compliance with the requirements.

Proper data quality control and assurance procedures appear to be in place to assure that the data was generated using methods consistent with the instrument operating requirements. The second point is that the data are not representative of the monitored area if the monitors are not located in a manner consistent with the siting requirements.

Based on these observations, the following statements on pages iv and v of the PLAN should be modified as noted in the redlined version of the PLAN developed by the State Chamber Environmental Technical Committee.

"All data generated by the network is verified to be accurate and reported by the Division and stored in the national database." Page iv

This statement is not accurate, particularly in reference to some of the "special purpose" monitoring data. The term "special purpose" is used in the context defined in the ambient air monitoring regulation. I hope it is accurate to state that data used for comparison against national standards are verified as accurate.

"All criteria pollutant monitoring is performed using EPA designated Federal Reference Methods (FRM) or Federal Equivalent Methods (FEM) to insure the precision and accuracy of the measurements across the state network and that the data can be compared to the National Ambient Air Quality Standards." Page iv

Based on your own staff's acknowledgement, PM2.5 data is collected using continuous Tapered Element Oscillating Microbalance (TEOM) monitors that do not meet the definition of either an FRM or FEM; therefore, this statement is not accurate.

"All criteria pollutant monitors and samplers are sited and operated consistent with the requirements of 40CFR §58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe siting) and the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards." Page v

This statement should be modified to read as:

"SCDHEC intends to operate its monitoring system with all criteria pollutant monitors and samplers sited and operated in accordance with the requirements of 40CFR §58 and Appendices A (Quality Assurance), C (Methods), D (Network Design) and E (Probe siting).

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As such, SCDHEC intends that the data collected by these samplers and monitors is suitable for comparison to the National Ambient Air Quality Standards. The SCDHEC further intends to assure that the samplers and monitors comply with as many of the recommendations contained within the regulations and applicable guidance documents as is possible. For this reason, SCDHEC will start-up and shut-down sites as necessitated by site conditions."

The third point is that for this PLAN, each time a monitor must be modified or relocated to achieve compliance with the site requirements, the proposed change should be explicitly stated in the PLAN. The redline version of the PLAN developed by the State Chamber Stakeholders Group reflects this point.

One final comment, the Bureau of Air Quality has made a statement several times that the "winter study" in Greenville demonstrated that the Greenville County Health Department (Greenville CHD) site produces data that is representative of the air quality in the downtown Greenville area or "neighborhood scale", as defined in the ambient air monitoring regulations. Repeated requests have been made for the statistical demonstration that the "winter study" data is comparable to the Greenville CHD data. I am concerned that these data have been not evaluated using statistical tools. I believe that any statement that the "winter study" data are the "same" as the Greenville CHD data is without merit in the absence of a statistical evaluation of the data.

SCDHEC has agreed to establish a new downtown Greenville site. Therefore, it is perhaps not necessary to do the statistics tests on the data generated in the "winter study" and from the Greenville CHD. However, if no technical evaluation of the data is made, it is not appropriate to make claims regarding the "similarity" or "representativeness" of the data generated by the monitor located at Greenville CHD.

Thank you again for the efforts of your staff and for your willingness to work with the various stakeholders groups both to evaluate the monitoring sites and to comment on this network plan.

Singerely,

Ruth A. Albright, P.E.

Principal, SynTerra Corporation

Cc:

Mr. Tommy Flynn, Bureau of Air Quality, SCDHEC Ben Haskew, Greater Greenville Chamber of Commerce, Cleveland Street, Greenville, South Carolina